

A PRACTICAL & FAMILIAR TREATISE ON RUPTURES,

CONTAINING

AN ENTIRELY NEW AND APPROVED METHOD
OF TREATING THESE
DISTRESSING AFFLICTIONS,

THROUGHOUT THEIR VARIOUS STAGES.

Illustrated by Eight distinct Drawings of

TRUSSES AND BANDAGES,
DIFFERING,

Both in their Principle and Effect;
FROM ANY PREVIOUS INVENTION;

WITH DIRECTIONS FOR THE APPLICATION OF EACH
TRUSS, OR BANDAGE,

TO SUCH CASES AS THEY ARE RESPECTIVELY ADAPTED.

With an Engraved Plate, exhibiting

THE INTERNAL STATE OF THE BOWELS.
WITH CRITICAL REMARKS FROM THE AUTHOR.

There be many that say, " Who will shew us any good ? "

PSALM 2, v. vi.

DEDICATED TO THE ROYAL COLLEGE OF SURGEONS,

By WILLIAM COLES.

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TO THE

ROYAL COLLEGE OF SURGEONS.

GENTLEMEN,

PERMIT me to lay before you the following pages, the object of which is to relieve, if not the most important, the most afflicting disease with which any human being can be visited, viz. Ruptures.

I shall not presume, Gentlemen, in this place, to offer many remarks, but allow me to observe, that if my own sufferings during a period of several years, and the experience which they have taught me, can afford any alleviation, in so distressing a case as Hernia, to such as are doomed to labour under its influence, those sufferings will be soothed in the gratifying reflection, that a probability now exists, of its being some day, not only of national, but of worldly importance to mankind.

The only observation, Gentleman, I would here make relative to myself is, that my affliction was considerably aggravated by wearing a patent Truss, which possessed no other flexibility than those which have been employed for centuries past, and which, experience has since taught me, arose from a deficiency of an internal action in the pad.

As I possessed a tolerable share of mechanical

genius, I was led to the discovery of a new principle which completely obviated that inconvenience under which I had suffered the severest tortures, and which, I am happy to add, is found useful in hundreds of different objects, for which it had never before been employed ; particularly such Instruments as are universally employed to relieve the above complaints.

I have taken the liberty to publish the opinions given by many eminent gentlemen of the faculty in favor of my improved Trusses and Bandages, many of which I have been favored with, without solicitation, as well as from private individuals who have experienced relief from them alone, after every other means had failed.

Having thus far attained so prond a pre-eminence, the fruits of many laborious days and nights, attended with considerable expence, I now humbly venture to solicit a share of your patronage in proportion to the merits which my Trusses may, in your estimation, possess, as a reward for my exertion and perseverance in the cause of humanity.

I am, GENTLEMEN,
with sentiments of the highest consideration & respect,
your most obedient and very humble Servant,
WILLIAM COLES.

PREFACE.

DEEPLY impressed with a sense of the important subject to which I have before alluded, and the innumerable difficulties which have hitherto arrested my progress since commencing this Business, fully justifies me in the resolution I have taken to furnish this little volume of transactions, which perhaps, in any other country but Great Britain, would have been hailed as the happiest omen of good to mankind,

It is not, as might well be supposed, to display my abilities as an Author, a task for which, I candidly confess, I am, from the nature of my pursuits, (independent of my education,) utterly incompetent. My principle object, therefore, is to render my Book as intelligible, and my services as useful, as possible, to all who may have the misfortune to require my advice or assistance.

Possessing a competent knowledge of the Anatomical Structure, and a general idea where each par-

ticular case is seated, by having been afflicted with one of its worst species, I was compelled to direct my most strenuous attention towards effecting a more perfect and convenient security than any thing which human skill could then furnish, or permit myself to become a prey to one of the most degrading of all human maladies.

So various and complicated are the different species of Rupture, and so subject is the human frame, from a variety of causes, to visitations of this afflicting nature, that notwithstanding the wide field which is open for the display of mechanical genius to furnish relief in such cases, nothing had previously been suggested which was at all calculated to afford relief to a Ruptured Patient, with that degree of security which could lay claim to public patronage.

Where people have models to work from, it is no difficult task to imitate them; this, however, was not my case: I had no pattern to imitate, nor any person to instruct me: my own imagination, instigated by my personal sufferings, aided me in accomplishing what a less efficacious stimulus could not have suggested.

In studying, therefore, to relieve myself, I am providentially blessed with the means of affording relief in cases infinitely worse than my own.

What will a certain Truss-maker say, who advised,

one of my Patients* that he would not be safe to ride home, even in his carriage, with a Bandage such as will hereafter be described, and therefore lent him a German Truss as a better security, until he could furnish him with a new one, when he peruses this little manuel, and finds, that many of the most distinguished and ablest judges in the kingdom, (with whom he has been upon terms of intimacy,) have declared mine to be the greatest improvement that has ever been made in the construction of a Truss, and some have said, that it is the only real improvement that has ever been submitted to their inspection.—See Dr. BIRKBECK's *Opinion*, as recorded in vol. 1, *Mechanic's Magazine*.

The principal object I have in view, is to remove the prejudice which a Patient, suffering under this affliction, naturally inculcates, when he finds every apparatus, which he had made use of, fail to secure his Rupture; nor has the Surgeon, who recommends these instruments, less reason to be prejudiced: for it sometimes gives them an infinite deal

* As the Patient here alluded to had a good whcel-barrow full of Trusses in his possession, not one of which was of the least service to him, I had the curiosity to enquire, about twelve months after, whether he was in a fair prospect of cure, when I learned, he was so benumbed with pressure, that he had fallen down stairs and killed himself.

X.

of trouble. A senior Surgeon of one of our Hospitals, on being told that I had an *improved Truss* to shew him, swore *he would be d——d if he ever would look at another Truss so long as he lived*. There are, however, men who stand high in the profession, who were equally as prematurely prejudiced, who have been kind enough to retract their opinion in my favor, whose respectability is equally as indisputable as the competence of their judgment. Under the impression that my improvements will meet the sanction and patronage of my readers, I beg to refer them to the substance of the following pages.

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TREATISE ON RUPTURES.

SYMPTOMS OF RUPTURE.

RUPTURE, or Hernia, is well known, in every part of the habitable Globe, to be one of the most distressing maladies, that human beings have to encounter; and it cannot be a matter of surprise, that its sufferings should excite the most ignorant and unlearned to employ their skill in inventing means to relieve themselves; and, when they have so done, to convey a knowledge thereof for the benefit of those who may be labouring under its influence.

Since, then, this is a disease to which even the strongest and most healthy are equally liable with those of the most delicate constitutions, and that it is to be found among all ranks of Society, from a Prince to the humblest peasant, and frequently disorganizes the whole frame, before it makes any external appearance.

Costiveness and weakness, accompanied with severe pains when coughing or sneezing, are its usual symptoms; and although the Patients feel the necessity of a constant pressure upon the part, they are totally ignorant of the means generally employed, and where to obtain them. They feel their constitutions impaired; and being entire strangers to the real cause of their disorder, generally employ some internal remedy, which tends to weaken the diseased parts, and confirm their rupture, while the still more necessary precaution of pressing* upon the part, is wholly neglected.

Others, either from motives of delicacy, or from total neglect, treat this disease with perfect indifference; and permits it to advance beyond the possibility of its being again returned into the body, before they can prevail upon themselves to divulge a secret with which every person who sees them is already but too well acquainted.

* A large pincushion, with a girth attached to it, and tied round the body, might be employed; or the common Truss may be worn for a few days, until a proper one can be procured; but ought never to be relied upon.

APPEARANCES OF RUPTURE, AND MEANS OF CURING IT.

Rupture, or Hernia, is a swelling produced by a protrusion of the bowels, which ought naturally to be contained within the cavity of the belly.

Its appearances are generally in the stomach, navel, belly, groin, scrotum, or purse; and in females, the fore part of the thigh; and are therefore denominated Ventral, Umbilical, Inguinal, Scrotal, or Femoral Ruptures.

To use the language of the late PERCIVAL POTT, Esq. of St. Bartholomew's Hospital, in his valuable Treatise on Ruptures, "There is no radical Cure, except for young persons;—that to replace the prolapsed bowels within the cavity of the belly, and prevent its falling out again, by means of a proper bandage—is all that the art of Surgery is capable of doing in this disease."

Sir A. COOPER, in his valuable Treatise on Hernia, chap. v. page 15, observes, that he has known a Hernia cured in nine months; but he, nevertheless, advises a Truss to be worn two years at least, even

by young persons; in whom alone the complaint is curable by this method.

Every Truss, therefore, should be so constructed as to produce pressure without irritating the parts.

Infants are seldom known to cry, except when in pain. It therefore behoves Parents, who have any regard for their offspring, to take the earliest opportunity of ascertaining the most probable means of curing them. Nothing can retard the progress of cure more than crying.

It is likewise the duty of every nurse, who has the care of ruptured infants, to keep this Book in their possession. Ladies cannot make a more valuable present to their nurses. Thousands of infants have died of this disease before the mother or nurse had any idea of their being ruptured.

Professor LAWRENCE, in his valuable Treatise on Ruptures, page 98, observes, "that the improvements which have lately been made in the construction of Trusses, have greatly diminished the inconvenience attending their use." The Reader will find more substantial evidence of this fact towards the end of this Work.

The important Office required of Trusses.

No Truss can be said to have performed its office, which has not kept the Hernia firm within the ring, and entirely prevented its approach into the lower extremities.

Those Patients who have had recourse to the best means of obtaining relief, and find their Ruptures still getting worse, is an evident proof that the Truss they wore was defective, and that they might have suffered much less had they never wore them.

All those Patients who have placed themselves under my care, having a bad rupture, have attributed it to the following cause, viz. the common Truss, which is either manufactured or sold in every Town or Village in the Kingdom, and is therefore almost universally recommended to newly-ruptured Patients; its defects are never pointed out to the Patient by those who supply them with that article. The common Truss having no internal action in the pad, and its position naturally inclining inwards, presses much harder at the end than in the centre of the pad, where the Rupture lies: it is always goad-

ing the Patient; and seldom, if ever, produces an equalized pressure upon the ring, or opening, where the Rupture protrudes; and thereby permits the Rupture imperceptibly to advance lower and lower, until it is completely out of the reach of the Truss; and the Patient feels considerably more punished with it than he would have been without it. At length, he is under the necessity of dispensing with Trusses; and the Rupture sometimes increases almost down to the knees; in which state I have known some persons continue a miserable spectacle for nearly twenty years. “The vast size to which neglected Hernia sometimes increases, not only prohibits all active exertion, but by involving in the male the integuments of the penis, incapacitates the subject from the act of copulation. These considerations should render every person, afflicted with a Rupture, anxious to have the parts replaced, and to have a proper Truss.”—Professor LAWRENCE’s *Treatise on Ruptures*, page 67.

See also Sir A. COOPER’s Treatise on Hernia, in which is mentioned a Case of a Black, who was seen by Sir R. WILSON, in Egypt, having an Umbilical Rupture which reached from his navel to his ankles.—*Chap. iv. page 12.*

EXPLANATION OF VENTRAL AND UMBILICAL HERNIA.

VENTRAL HERNIA is occasioned from the peritoneum, or their membrane, which lines the stomach and bowels, giving way, and thereby admits a portion of air, which produces a tumour or swelling in different parts of the stomach, or belly ; and although it is not liable to strangulate, it frequently produces spasms in the stomach ; and is besides of considerable uneasiness to the Patient ; and, like other Ruptures, is constantly increasing in bulk, unless it is compressed within the body.

UMBILICAL HERNIA is a portion of intestines which make their appearance in the navel ; the opening through which they pass is called the ring, whence a small portion of gut, either in the situation of the navel or groin, not larger than a walnut, frequently produces strangulation ; and when it cannot be returned within the body, an incision must be made in the belly, or groin, to enable the Surgeon to reduce it, which, in surgery, is termed an operation.

The following is copied from Professor LAWRENCE's Treatise on Ruptures :—

“ As soon as the cicatrix (wound) has acquired a sufficient firmness, and before the patient leaves his bed, a Truss should be applied, and must be constantly worn. The operation only removes the immediate danger, leaving the patient still subject to a future protrusion of the bowels, which, indeed, often takes place to a greater extent than before.”

Hence arises the necessity of a different kind of Truss than the patient had previously worn, or he can benefit but little by the operation.

A certain nobleman lost his life, after undergoing the operation, in consequence of the incapacity of his Truss to secure the Rupture.

“ Every feeling heart must deplore the sufferings and death of the late illustrious Duke of Bedford. His death was a national loss, and can only be nationally repaired, by exciting an investigation into the best mode of effectually securing Ruptures.”—*W. HALL TIMBREL's Practical Observations on the Management of Ruptures, page 69.*

Explanation of Inguinal Hernia.

INGUINAL HERNIA is by far the most general ; its appearance is in the lower part of the abdomen, or groin, occasioned by a portion of intestines forcing a passage through the canal, or internal opening. This species of Rupture, and that of the navel, is as capable of being cured in young patients, as a wound in any other part of the body, and the dangers of strangulation avoided by the timely application of a Truss, which must be so constructed as to enable the patient to endure a constant pressure ; for if a Truss is only worn a few days, and from its galling qualities the patient is induced to leave it off, if the Rupture lies in the groin, he may soon expect to have the whole contents into the scrotum or purse.

INGUINAL HERNIA, as it regards the female, is very similar to the Inguinal Hernia in males. The round ligament of the uterus supplies the place of the spermatic cords, except that the opening in the external oblique is considerably smaller ; and unless the intestines, omentum, &c. are secured by pressure, patients ought never to consider themselves out of danger.

Explanation of the Femoral and Scrotal Hernia.

The FEMORAL RUPTURE, which most frequently occurs to the female, and often happens to the male, is easily distinguished from Inguinal or Congenital Hernia, from its appearing in the hollow of the groin, close to the thigh. "The latter description of Hernia is when two Ruptures unite in the same focus."

SCROTAL HERNIA is so called from the position of the intestines, caul, or omentum, and sometimes air, which has forced a passage into the scrotum, or purse, which is very frequently the case in defiance of every instrument that has yet been invented to confine it, the Scrotal bandage excepted, See fig. 4. and even this bandage, when the bowels are in a very relaxed state, will allow a portion of the omentum to protrude in very large Ruptures, but not so as to cause pain or danger, as it so effectually closes the opening as to prevent the intestines from passing down; it is also the most comfortable instrument that has yet been constructed, and may be worn night or day, with as much ease as a pair of drawers.

Treatment of Strangulated Hernia.

STRANGULATED HERNIA is generally produced by some violent exertion, when the Rupture is not effectually secured, whereby the patient is suddenly seized with sickness, and sometimes vomiting. Whatever may be the object of his pursuit, let him retire to bed, and place himself in a recumbent posture, and procure Surgical aid, if possible.

If the bowels are in a confined state, a dose of salts, or jallap, or other opening medicine, may be taken, and a clyster of warm mutton broth, or gruel, may be thrown up, the medicine being frequently thrown off the stomach without producing the desired effect.

Let the patient keep perfectly quiet, and avoid talking, and lay on his back with the knee rather raised up on the side of the complaint; and let him, if he cannot get surgical assistance, press upon his Rupture for several hours together with both hands, which will produce a warmth, or perspiration; and when the parts become relaxed, he should endeavour to return it himself. If the Rupture is in the scrotum, he should first divide it from the testicles with one hand, and press it gently upwards, and with the fingers of the other hand, endeavour to conduct it by small quantities through the channel whence it de-

scended, from thence it should be pressed sideways into the hollow of the groin. However ignorant the patient may be of the direct point to which the Rupture recedes, he might probably effect its return, which by a few hours delay might be rendered ineffectual by the most skilful surgeon. Had the nobleman, whose misfortune I have before alluded to, done this, his life, in all probability, would have been saved.

Patients thus circumstanced should act with firmness and composure. Some persons have been known to ride and drive many miles to get into a hospital, in the hope of being furnished with a Truss. Take it for granted that it is not the practice of hospitals to furnish patients with Trusses, unless they first undergo the operation.

Should the above method fail, ices applied for a considerable time to the part affected, or the warm bath, must be employed to produce relaxation. When this fails, an operation is unavoidable.

THE AUTHOR'S CASE.

ABOUT four years since I had the misfortune to bring on a Rupture, in consequence of a stoppage in the bowels, which continued eight or nine days. I sent for a medical friend, who examined me, but could perceive no external appearance of Rupture.

He advised me, as a matter of precaution, to wear a Truss, which might prevent its getting worse. I then sent a note, with proper directions of size of the body, to a very ingenious Patent Truss Maker, (the principle of which had been explained to me some years before,) requesting him to make me a Truss; the spring, although stronger than I could well bear, failed, during the most trifling exertion, to secure the Rupture ; the pad being of an oval form, was capable of being adjusted, but became, when screwed, perfectly stubborn in effect, like the common Truss, which irritated and inflamed the part, and produced a continual soreness upon the body, and frequently permitted the Rupture to escape, when it acted powerfully in forcing the intestines down. I was under the necessity of retiring to my chamber frequently, in the day time; and placing my body low, and my

feet against the wall, or bedpost, to allow it to descend, as generally, towards the latter part of the day, the Hernia became so painful, that I could not bear to touch it with my fingers. I had scarcely worn my Truss six months, when I was under the necessity of dispensing with it entirely, and I bound myself with an oath, that I never would attempt to wear it again. I then made my case known to a very celebrated Surgeons' Instrument-maker, with whom I had been formerly acquainted, who knew much better than I did what the properties of Trusses were, and probably of that which I had worn myself, and he declared that he did not know a better.

It would not be prudent to give a relation of what passed between us on that occasion. If I were, I am persuaded it would open the eyes of my fellow sufferers more than any thing which has ever been said or written upon the subject; suffice it to say, that he advised me not to throw away my money anywhere. He observed, that I had brains in my head; (a very common phrase among mechanics) and if I chose to set them to work, he had no doubt but I, could contrive something which would answer my purpose, at least.

Whether I have accomplished that desirable object, time will shew.

It is certain, that I can say nothing in its favor

which has not already been said by the inventors of every newly-eonstructed Truss. To offer any comment would be useless. I shall, therefore, content myself with copying a few remarks which have fallen from the pens of several well-informed writers, and add the testimony of a few disinterested persons, and leave my readers to judge for themselves.

*Extract from Dolby's New Edition of Buchan's
Domestic Medicine.*

“Surgery, in all ages, has been considered the most important of all science, beeause it conduces most towards removing the impediments to the happiness and comfort of mankind.

“There is also a Science connected with it, which, (although a mechanical one) is but little inferor to it, viz the instruments with which they perform those operations. We cannot remain silent observers of the progress which has lately been made in one of its most important branches,

THAT OF TRUSSES.

“Among the various diseases incident to mankind, there are none more painful, nor more dreadful in its consequences, than Ruptures; nearly one-eighth of the population of this kingdom, (and in warm climates a

still larger portion) are under the necessity of wearing, during a great portion of their lives, some mechanical apparatus either to arrest its baneful progress, or to alleviate the sufferings of its victim. We shall devote a small portion of our pages to illustrate and render this subject more familiar to the Patients.

"The only remedy for this disease is a Truss, or Bandage. Whatever its principle or construction may be, it is in appearance but a simple and insignificant machine; it is, nevertheless, one of the most important instruments in Surgery; deprive a man of his Truss, and you will soon deprive him of existence; it is not the instrument of a day, a week, nor a year, but generally for the term of life; therefore every person who has, or may hereafter have the misfortune to require the aid of such an instrument, should endeavour to bear in mind, that however strong, or healthy they may be, they are equally liable to this disease with those of the most delicate constitutions, and that it regards neither rank, age, nor sex. Its symptoms are severe pains when coughing or sneezing; its appearances are in various parts of the abdomen, but most commonly in the groin, where a tumour, or swelling, is produced by a protrusion of the intestines, called, in Surgery, Inguinal Hernia; and if the Patient does not confine the intestines by a pressure upon the ring, or opening, where the tumour appears, the parts be-

come inflamed, and mortification frequently ensues;* if the intestines are suffered to proceed, the male patient will soon have the contents of the bowels into the purse, or scrotum, whence it is called Scrotal Hernia, and that of the female into the fore part of the thigh, whence it is called the Femoral Hernia; Femoral Hernia sometimes occurs to the male, and is even worse than the Scrotal Hernia.

" If we may be allowed to judge from what appears in the 28th number of the Quarterly Journal of Science, Literature, and Art ; Nos. XI, XIII, and XVI, Quarterly Medico Chirurgical Review ; Nos. 288 and 294, London Medical and Physical Journal ; No. 118, London Medical Repository ; volume 1, or No. 27, Mechanics Magazine ; and numberless other Journals, all of whom have given an opinion without fee or reward, we should not hesitate to say that Mr. COLES has made a better improvement in the construction of Trusses within three or four years past, than has been made before in as many centuries.

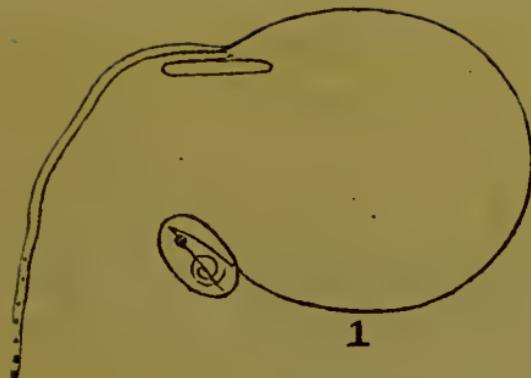
" It may be proper to observe, that lusty people can endure much greater pressure than lean persons ; and it would be advisable when the Patient is punished by the pad of a Truss, to put an old silk rag or handkerchief, three or four times double, under the pad

* A recent case is more liable to the above *cause* than one of long standing.

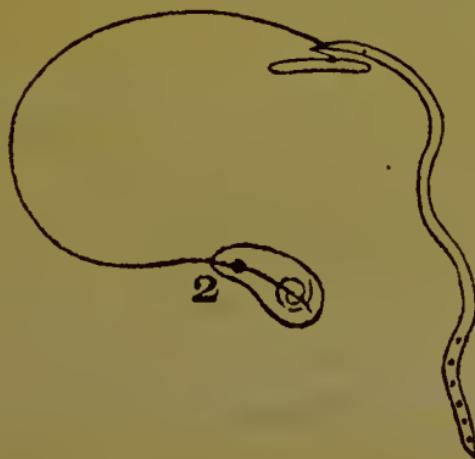
of his Truss, and in case the Patient should have a sore place under any part of a Truss, he should always apply a piece of fine white rag, and never let the leather of his Truss come in contact with it, as the leather will assuredly draw it to a wound, and the moisture arising therefrom will rot and injure the Truss, as will also filth or dirt of any description; the parts affected should be washed at least once a week in cold water.

" In case the cushion in the back of the 3-quarter Truss, *fig. 1*, should not press in the center of the back, take out the two screws, and reverse it, taking care that the longest screws is fixed into the holes wherein you can thrust a pin through the cushion, In case of Femoral Hernia, the cushion should press beyond the centre of the back, so that the Truss shall have an equal bearing, back and front. *Figures, 2, 3, 5, and 7*, should press also in the centre of the back, which will only require the use of a screw-driver to enable the Patient to shift the cushion.

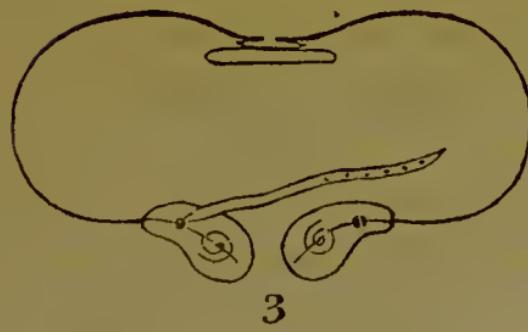
" In cases of Scrotal Hernia, the fore part of the shirt should rather be confined under the waistband of the small cloths, than between the legs, in which case, the parts will keep airy and cold: nothing can be more injurious to a Ruptured Patient than keeping the parts in a state of perspiration.



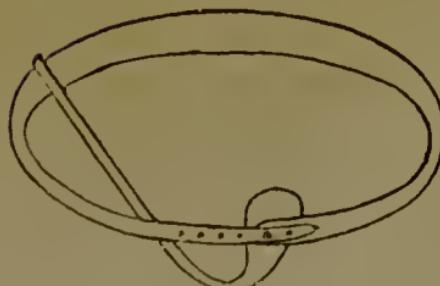
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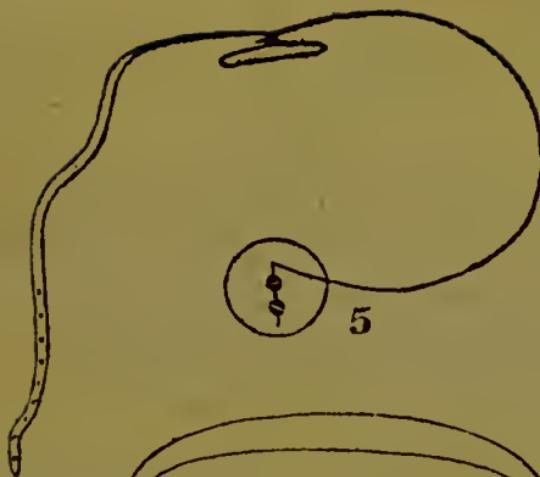
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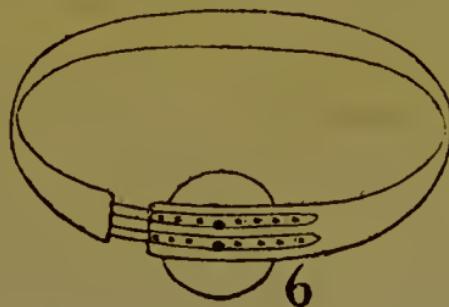
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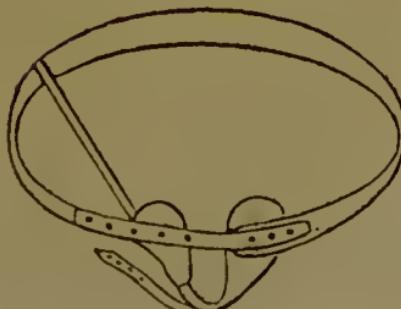
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EXPLANATION OF THE DRAWINGS.

FIG. 1, is an opposite-sided Truss, having a returned end to the outer spring, with two holes to admit two screws, by which it is screwed to the spiral spring in the front pad ; there are also several holes in the spring to enable the Patient to shift the back cushion directly opposite to the pad upon the Rupture. This Truss does not merely possess a self-adjusting movement, but that which is of infinitely greater importance—a yielding resistance to the descent of the Rupture. The strap is brought round the body, and looped to the screw-head of the front pad, which gives it a degree of firmness necessary to the security of the Patient, without drawing the pad from the Rupture, which is always the case with other self-adjusting Trusses.

FIG. 2, is a half Truss ; the front pad resembles the common Truss in its form ; it possesses the same yielding quality as the former ; it is to be applied on the Ruptured side ; a cushion is screwed in the center of the back, which, by means of a spring, yields in all directions ; a strap forms the other half of this Truss, which is looped on to the front pad.

This is the Truss to which Mr. EARLE particularly alludes in his certificate.

FIG. 3, is a double Truss, upon the same principle as the latter: the springs have several holes in the back, and are screwed to a cushion, which presses on the center of the back, and which is capable of being increased or diminished in size.

FIGURES, 1, 2, and 3, are proper to be employed in cases of Inguinal or Femoral Hernia; neither case requires any under strap.

FIG. 4, is a bandage for a left-side Scrotal Hernia, having only one spiral spring in the center of the pad the girdle has a piece of steel plate stitched into one end, which is screwed to the pad: the pad, being placed upon the opening into the purse, is drawn across the neck of the bladder, to the hip bone, opposite to the Ruptured side, one end of which forms a loop, and the girdle passes through it, and is looped to the screw in the pad, by which its pressure is that of a lever acting upon the spiral spring.

The pad is made to fit the os pubis, and is not intended to press upon the Rupture, as other Trusses do, but merely to close the opening into the purse, through which the majority of old Ruptures will escape in defiance of every other Truss which has yet been employed to confine it.

A strap, or ribband, may be looped to the girdle behind, and worn next the body, and buttoned to the drawers, or small clothes, in front. In case the

Patient has not a good hip to keep it up, this brace over the shoulder will be found a great acquisition in walking, or riding. *If the Patient wears a flannel waistcoat, a loop should be sewn upon the shoulder to keep it in its place.*

Fig. 5, is a half Truss for Umbilical Hernia. The spring is bent down square in front, and has two holes; the front pad has two spiral springs, to which the outer spring is screwed, which effects a gentle resistance to the rude pressure of the outer spring, and prevents the possibility of the pad giving way at bottom; the cushion should press in the center of the back, which is capable of being bent to fit the back. The strap forms the other half of this Truss, and its pressure may be increased at pleasure by looping the strap tighter.

Fig. 6, is a bandage for Umbilical or Ventral Hernia, having from one to three spiral springs placed near the center of the pad, capable of resisting from seven to twenty pounds pressure, over which is a piece of steel, or tin plate, stitched into the girdle or band, and screwed to the spiral springs, whereby its pressure is that of a lever acting upon the spiral springs. In slight cases, however, the band need not be more than one inch and a half wide, with a few holes at the end to loop it on to the front pad, to which

should be added, a slight neck strap, or ribband, to prevent its sliding down, which will be found to answer every expectation. But in bad cases, the band or girdle must be wider, and two straps are sewn to the end of the girdle, having several holes, which are to be looped on to the screws of the front pad, whereby its pressure is equal to a spring Truss, and might be worn day or night, without the slightest inconvenience.

Figures 5 and 6, are referred to in Mr. MARTIN's certificate, which will be found the most effectual and comfortable instruments that have ever been employed in cases of Umbilical Rupture, or Corpulence.

Those Ladies or Gentlemen who have been accustomed to wear Mr. GORDON's Elastic Steel Belt, the springs of which are riveted or screwed to the back cushion, will find the spiral spring admirably adapted to that instrument, which will render the springs less liable to break, and afford them a greater portion of elasticity than can otherwise be obtained.

Fig. 7, is a double spring Truss, adapted to secure an Inguinal Hernia on the left side, and a Scrotal or Omental Hernia on the right; the latter pad is formed like the Scrotal bandage, and is made to fit the os pubis: it has two spiral springs, to which the outer spring is screwed. This Truss has been found to answer every expectation, in cases of the

above description, where an objection has been raised to a continuation of the strap between the legs.

Mr. MASON's certificate refers to figures 4, 6, & 7. Mr. HILLMAN's, and Dr. VICKERY's, to fig. 3.

Fig. 8,—is a bandage for a double Scrotal Hernia, having a steel plate stitched into the girdle immediately over each pad ; one plate has several holes to enable the Patient to shift the pad, if required ; a strap is sewn to the long pad, which is intended to loop on to the short pad, to confine it down. I can confidently state, that I do not meet with one Rupture in twenty, of the above description, which is capable of being returned into the body ; but this bandage will effectually resist its descent.

I have had great experience in cases of irreducible Hernia ; and have invented an instrument which will effectually prevent the Rupture increasing, and render the Patient secure and comfortable.—
See *Hubbard's Affidavit*, page 47.

☞ None of the above Trusses are proper to be employed in cases of irreducible Hernia.

Extract from No. 28, Journal of Science, Literature, and the Arts, Royal Institution.

"WE understand that Mr. COLES has effected a

considerable improvement in the construction of Trusses, by which the pressure upon the ring is not merely equalized, but which adjusts itself, without inconvenience to the wearer, to the different attitudes in which the body may be placed."

No. 11, of the Medical Chirurgical Review, gives a drawing and description of the Trusses, with directions how to apply them to such cases as they are best suited.

This Journal anticipates, that, at no distant period, one of the first Rupture Societies in the world will be Established upon this Principle.— A Subscriber to the City Truss Society, who resides in Shoe Lane, at a very old establishment, informed me, that he had paid nine guineas to that charity; and he had never been applied to but once for a Truss during nine years, which he furnished; and soon after it was returned to him as being of no use to the Patient.

On the other hand, a poor hard-working man, residing in Crown Street, Soho, having a wife and four children, informed me, about two years since, that the truss he had worn for two years became broke; and his Friend, a Subscriber to the City Truss Society, who had furnished him with it, having gone abroad, he represented his case to the Surgeon,

and likewise to their Truss-maker, who refused to furnish him with a new one, or a clue to a Subscriber. I saw that man last winter, who told me that his Rupture was much worse; and he declared that he had the same piece of a Truss on his person then which he had worn four years.

Extract from No. 118, London Medical Repository.

“ An ingeniously contrived Truss has been submitted to our inspection, which appears well calculated to answer every expectation of such an apparatus. The chief difference between this and the common Truss, consists in two spiral springs being introduced between the Truss and the pad; which, whilst it admits of a self-adjusting movement, furnishes a sufficient degree of yielding pressure. We are acquainted with several cases in which these Trusses are now made use of; and the principle appears to us sufficiently novel and ingenious, to induce us to draw the attention of Surgeons to its merits.”

The following certificate of its practical utility justifies us in our desire, that ingenious and useful inventions, connected with our profession, should at least obtain that reward which publicity is calculated to obtain for them:—

Certificate from HENRY EARLE, Esq. F. R. S. Assistant Surgeon to St. Bartholomew's Hospital, and Surgeon to the Foundling.

I hereby certify, that Mr. COLES has perfectly succeeded in keeping up a very difficult and complicated Rupture, on which I operated some years since, in which case many of the best Truss-makers in London had failed to afford any relief.

When I placed this Patient under his care, I promised, should he succeed, to give him a certificate of my approbation; and in conformity with that, I now state my firm conviction, that his Truss will be found more efficacious than any at present employed in similar cases. I have since tried his Trusses in other cases, and have been much pleased with the ingenuity he has displayed in adapting his means to the circumstances of each case.

HENRY EARLE,
28, George Street, Hanover Square.

JULY 23, 1824.

Extract from No. 288, London Medical and Physical Journal.

“ A Truss of a very ingenious construction has lately been submitted to our inspection, backed by a strong recommendation from a Medical Friend

who has proved its efficacy in his own particular case. It is the Invention of a Mr. COLES, residing at London Bridge. Although it is not very easy to convey an accurate idea of any instrument by mere words, we may, perhaps, be enabled to afford some explanation of the difference which exists between this and the common Truss, by remarking, that two spiral springs are introduced between the Truss and the pad, which, whilst it admits of a self-adjusting movement, permits a certain degree of yielding pressure. We are acquainted with several cases in which those Trusses are now made use of; and the principle appears to us sufficiently novel and ingenious to induce us to draw the attention of the Medical Profession to investigate its merits."

Mr. HENRY EARLE's certificate appears in a subsequent number of this Journal, with further remarks from the Editor.

Extract from No. 4, of the Family Oracle.

" Those who want Trusses, may try Mr. COLES's, of London Bridge. Our friend, Mr. HENRY EARLE, informs us, that they are superior to all others; and we cannot suspect him of abetting a puff. We intend, bye-and-bye, to examine Mr. COLES's improvements more minutely."—See also Nos. 7 and 8 of the *Family Oracle*.

No. XIV. Medico Chirurgical Review has likewise inserted Mr. EARLE's certificate.

Extract from No. XVI, Medico Chirurgical Review.

"I hereby certify, that I have twice suffered the dangers of Strangulated Hernia, which had almost proved fatal. I placed myself under the care of an eminent Surgeon in this neighbourhood, from whom I learned that Mr. COLES had given proofs of extraordinary talent in his profession. A Truss was procured, (*see fig. 5.*) which effected a pressure of at least sixteen pounds upon the Hernia, which was not removed from the part for fourteen days and nights. He has since applied a bandage, (*see fig. 6.*) which I have worn for a much longer period without removing it. It is with great satisfaction that I can inform those who may be similarly circumstanced, that I have never suffered a shadow of pain since I have been under his care.

" JOHN MARTIN,

Licenced Victualler,

" *Dover Castle Inn, Deptford.*"

Nov. 21, 1823.

If a patient wishes to ascertain the pressure of his Truss, let him find the diameter of his body, which, in a man of Mr. MARTIN's stature, is about twenty

inches ; hold the Truss in your hand, and suspend as many pounds weight to the front pad as will open it twenty inches, will give you the exact pressure.

I hereby certify, that I have had the misfortune to be afflicted with a very distressing Rupture upwards of ten years. I consulted a very eminent Surgeon, who recommended me to his Surgical Instrument-maker for a Truss of the common sort; which Truss having failed to secure the Rupture on the right side, another Rupture took place on the left. The Truss injured and inflamed the parts to that degree which sometimes prevented my wearing it for several weeks together. The cause of my sufferings became known to several friends, who advised me to try Mr. COLES's Patent Bandage : and I feel great pleasure in testifying to the world, that he has rendered me that ease and comfort which, at my advanced age, I never again expected to enjoy.

JAMES DANIEL, Sen.

156, *Tooley Street, Southwark.*

26th APRIL, 1824.

I hereby certify, that I have employed Mr. COLES to construct instruments for supporting the body in cases of distortions of the spine ; and I find that his instruments will adapt themselves much better to

the different attitudes of the body, and afford the patient much greater comfort, than any others with which I am acquainted.

WILLIAM COMPSON,
Surgeon to the GENERAL DISPENSARY,
Aldersgate Street.

3, *Frederick's Place, Old Jewry, FEB. 10, 1824.*

Several of Mr. COMPSON's Patients have likewise worn my Trusses ; one of whom, a gentleman of great respectability, informed me, that he had formerly applied to a Surgeon of a Rupture Society, whom he supposed to be the best judge of such complaints. He paid a guinea to the Surgeon for his fee, and one guinea and half for a single Truss. After having it altered twice, he told the Surgeon that it would not answer in his case ; (*the Surgeon very unfeelingly replied, that he must do the best he could with it.*)

I feel great pleasure in giving my testimony to the efficiency of Mr. COLES's Truss, which I invariably recommend to my Patients. It is worn with comfort, and supports the protruding parts more effectually than any others with which I am acquainted.

JAMES MORSS CHURCHILL,
13, *Princes Street, Leicester Square.*

17th MAY, 1824.

Extract from No. XVI, Medico Chirurgical Review.

London } ROBERT HUBBARD, of the parish
TO WIT. } of St. Sepulchre, London, maketh
oath, and saith, that he hath laboured under a very
severe Rupture upwards of thirty years, which has
increased to an enormous size, and disabled him
for many years past from following his avocation as a
Smith; this deponent likewise worked as Journeyman
for several eminent Truss-makers in London, but he
never saw a Truss in his life which was calculated
to secure his Rupture in its present state, until Mr.
COLES applied one of his invention, whereby he, the
said deponent, hath been rendered perfectly secure,
and free from pain during eighteen months past; and
that he is thereby enabled to work at his business,
or walk four miles in one hour with ease.

(Signed.)

ROBERT HUBBARD,

Sworn at the Mansion House, before me,

W. HEYGATE, Mayor.

AUG. 20, 1823.

Another affidavit was drawn up in equally strong terms, and the Patient attended at the Mansion House during the Mayoralty of Mr. Alderman Bridges, who was then at Carlton Palace. He was a journeyman

founder, in the employ of Messrs. DEVEY, Shoe lane, who having intimated a desire to go again the following day, was prevented by the foreman, probably from an idea, that it might induce persons to call him from his work. The affidavit stated, that his sufferings, which at times prevented his working for a week together, originated from the incapacity of the Trusses which had been furnished to him by the City Truss Society, to secure his Rupture; he has worn a bandage ever since.

To Mr. W. COLES,

SIR,—A lady of this town having consulted us for her son, who has been Ruptured on one side since last October, and having in vain tried three different elastic steel Trusses, besides others without springs, to keep his Rupture from descending, found the one you sent us most satisfactorily, and most comfortably to succeed, the Rupture not having come down once since we first applied it in March last. One of the greatest advantages in your Trusses, is, that people can conveniently sleep in them, by which means they obtain a cure, though of many years standing.

I recollect, in Sir A. COOPER's Lectures on Hernia, he said, that if constant pressure could be made on

Hernias by night and by day, he had no doubt but very old Hernias might be radieally cured by it.

Your most obedient Servants,

W. C. HUNT & SON,

Dartmouth.

July 17, 1824.

Mr. HILLMAN feels pleasure in recommending Mr. COLES's self-adjusting Truss as being, in his opinion, the best instrument in use at this time, from its affording an uniform pressure under all the positions of the body.

Argyll Street, 8th July, 1824.

To Mr. W. COLES,

SIR,—If you had told me that you could stop the Thames from flowing, I should as readily believe it as I could believe you capable of constructing an instrument which would effectually secure my Hernia. Since you have performed so wonderful an operation, and rendered me as comfortable as any living creature can be, I should indeed be guilty of the basest ingratitude if I coneealed so great a blessing from my fellow-sufferers, and render myself unworthy the favor that has been conferred on

me, not only from you, but also the Honorable Commissioners of his Majesty's Customs, who kindly placed me under your care.

I shall, therefore, most willingly yield to ocular demonstration when any of your Medical or Private friends require it.

I am, SIR,

with sentiments of gratitude and respect,

your very humble and obedient Servant,

W. ANDREWS.
Camberwell.

SEPT. 15, 1824.

I hereby certify, that I have worn the Trusses of Mr. COLES's invention, for sixteen months past, and have found them more easy, and more efficacious, than any others which I had worn for fourteen years previously.

CARYER VICKERY, Surgeon, R. N.
London.

SEPT 20, 1824.

I hereby certify, that in various cases of Hernia, I have tried Mr. COLES's Trusses, and I find them very superior to any I ever used.

M. L. MASON,
Member of the Royal College of Surgeons,
Newington.

AUGUST 30, 1824.

London } JOHN HULBERT maketh oath and
to Wit. } saith, that he has laboured for sixteen
years under a very painful Rupture, and that his em-
ployers, Messrs. HEATH and Company, of Queen Street,
Cheapside, has procured for him, through the medium
of a friend, a single Truss, and also a double one, from
the City of London Truss Society, neither of which
ever afforded him any relief, although he believes
that he has been to the Society's Depò ten different
times, in the hope that their defects may be found out
and remedied. This deponent further saith, that his
Rupture is ten times as large as it was when he first
applied to the Society, in consequence of its having
no other support than a canvas bag for the last four
years, whereby the Rupture has continued to increase
in bulk; and he has been labouring for several years
past in continual misery, and frequently being com-
pelled to leave off work during his working hours,
and retire to bed.

This deponent further maketh oath, that the Rup-
ture is effectually secured by the application of an
exceedingly simple single bandage, the invention of
Mr. COLES, of London Bridge, and he is thereby ena-
bled to follow his occupation, which is very laborious,
as well as he could at any former period, and that he
finds his health and strength perfectly recovered;
and he hopes that by giving publicity to his case,

others who are labouring under this dreadful affliction, will avail themselves of the inestimable benefit which such an invention is calculated to afford.

(Signed) JOHN HULBERT,

Sworn at the Mansion House, 14th July, 1824,
before me,

R. WAITHMAN, Mayor.

Another Patient who has been upwards of thirty years in the employ of Messrs. STRINGER and Company, in Monument Yard, who are subscribers to the aforesaid society, whence he had been furnished with Trusses, informed me, that when their Truss-maker found he could not make him a Truss which was capable of affording him any relief, that he sent him to the Surgeon to be re-examined: as he believed the complaint to be something more than a Rupture, the surgeon ordered him back again, and directed that they should make him Trusses until they did make one to answer his purpose.

No words can describe the sufferings which this man has endured; the Rupture came down to the size of a large bladder when blown, the vacuum in the body became filled with air; and when he attempted to reduce the Rupture, the air was forced into a

wrong channel, which produced the spasms, and frequently threatened his dissolution; and rendered him utterly unfit for any employment. He then placed himself under my care. I secured his Rupture effectually with a single bandage, and I permitted him to wear it for a week; and I told him that if it did not answer his expectation, he might return it without being at one farthing expense; he never returned it, or complained of its not performing its wonted office.

There is likewise a Servant in the employ of the Lord Mayor elect, who is likewise a subscriber to the aforesaid society, whose Rupture got much worse while wearing their Truss, which he declared had almost killed him, and he never would go near the Society again; he likewise wears a single Bandage of the same description as the former Patient.

The Fishmongers' Company furnished a Patient with one of my bandages, whose case had baffled all the Rupture Societies.

Another Patient in precisely the same situation, as five of the foregoing patients, informed me that he made his case known to a worthy Alderman, not with a view of having a Truss given to him, but in the hope that his recommendation would ensure him a sovereign remedy for his affliction, of which the Alderman told him he need not doubt; off he posted to Hatton Garden, and delivered the Alderman's mes-

sage, or note ; and when he exhibited his case, " Oh," says the surgeon, " you want a double Truss."—" Double Truss, Sir," says the Patient, " I have only a single Rupture." At which the surgeon appeared offended, and he replied, if you know better than me, you had better go somewhere else. The Patient, perceiving that he had gone a step too far, at length yielded to the learned Surgeon's superior judgment ; a memorandum was then put into his hand, containing instructions to their Truss-maker, who, when he had taken the measure, asked the Patient if he was aware of the expence he was about to incur ; being answered in the negative, he resumed, it will be two guineas and half. The Patient said he had not so much money in his pocket, but if he would get it made in a few days, he would call and pay for it. The Truss was made, and the Patient, anxious to get relieved, cheerfully drew his leathers, when, to his astonishment, the *Surgeon had interfered*, and he was only to pay one guinea and half instead of two guineas and half. Probably the Surgeon had made an enquiry respecting the charge thereof, and thinking it rather unconscionable, he might have raised an objection to it in consideration of his being a working man, who had a very large family to support ; he had, besides, an awkward Rupture ; and he might probably foresee

the consequence, if they charged that enormous sum of money, and failed to secure the Rupture; and that it might lead to an exposure, which might possibly reach the ears of the person who recommended him; and he might have added, you know our worthy President has been a kind friend to us; and he has always done us a good turn whenever he had the opportunity.

Under such circumstances, he may probably advise a reduction in the price, especially if he had received his fee, which I forgot to make inquiry about. To prove a Truss you must wear it, (*but not until you have paid for it,*) and when you have ascertained its defects, you may have it altered and re-altered until your patience is exhausted, which was the case here, and the patient declares, that he never wore it more than two days. He has worn for one year a single bandage of the same description as the former Patients.

Another Patient informed me, that he had a letter from a Friend to procure a Truss from the above Society, which never secured his Rupture two hours. He also had it altered, and re-altered, and paid a sovereign fee to the surgeon out of his own pocket.

Another Patient took a child in arms from Peckham to get a Truss, and forgot to take the old one; he was obliged to lose a second days labour, and to bring the

child, and likewise the old Truss before he could obtain a new one,—this act of charity has induced both the father and son to wear my Trusses.

Subscribers little think that an old Truss may be converted into a new one at half the original expence!

I was once so charitably disposed, as to send half a dozen of my Patent Trusses a present to this Society, and offered, at the same time, to supply them with my patent Truss at fifteen per cent. less than the subscribers now pay for the common Truss, for which I never received so much as *I thank you*, I was told that my price might do for private Patients, but not for the poor.

Lord have mercy on the poor! I suppose those are likewise considered poor, who can only afford to pay two guineas and half for a Truss. There are four Rupture Societies in this metropolis; one of which supplies near four thousand Trusses annually, each of them adopts the common Truss, which they say will see out my invention, as it has done all others. Neither of these Societies has ever sent me a single Patient, (except Sir JOHN PINHORN, Treasurer to the Borough Truss Society, who sent me two patients only,) although I have frequently forwarded letters to their committees. The last letter which I addressed to the City Truss Society, was dated 9th January, 1822, which was laid before their Committee, wherein I

observed, that if their Surgeon coincided in the general opinion which the medical profession entertained of my Patent Truss, and he had a wish to continue their present Truss-maker, I would allow them the right to exercise my Patent, if they would pay me sixpence for a single Truss, and one shilling for a double one; and in addition to that, I would subscribe £10 annually towards the Institution ; this offer, like all the former, was rejected. It has long been the custom of several of the Rupture Societies, by way of advertisement, to furnish each Patient with a plan of the Institution. I shall confine myself particularly to that which is furnished at the expence of the subscribers of the City Truss Society, in which all the advantages which the Subscribers and the Public have derived since its commencement, are set forth in very glowing terms.

The Governors, (meaning the Subscribers,) are desired to be very circumspect as to whom they recommend, the charity having been imposed upon by improper persons obtaining relief.

Improper persons implies male or female decently attired, or such persons as can afford to buy a Truss; *for none, says the Pamphlet*, but those who are really indigent, can be admitted to receive any benefit from this charity! *And even those indigent persons* are not permitted to keep an old Truss in

reserve ; they might have a new one as often as they pleased, provided they return their old one, and go with a letter from any other subscriber.

The Pamphlet runs thus, “ To all affluent persons, regularly, or occasionally, employing workmen or labourers, who in their service are daily liable to accidents of the kind, relieved by this Society, who, it is not doubted, will feel the propriety, and also the pleasure, of becoming Governors ; the public are moreover assured, that the City Truss Society is conducted upon a system of discreet economy, the Governors of the City Dispensary having permitted the use of their premises, and the officers of this charity receiving no other reward for their services, than that of partaking with the Subscribers at large in the “ *rich luxury of doing good.*” This is the most complete hypocritical cant I ever read. If I am rightly informed, the Apothecaries’ Company only pays half the price for the common Truss to sell to the rich, which the Subscribers now pay for their Trusses to give to the poor. I pledge my honor, that I can get my living by making better Trusses for five shillings, than that which JOHN HULBERT obtained from the Society, which cost MR. ALDERMAN MAGNEY fourteen, which together with the single Truss which he had before, cost one guinea, which sum would have procured two effectual Bandages, such as HULBERT now wears.

"Oh ! prejudice, how blind thou art!"

I will venture to assert without the fear of contradiction, that millions of such articles have been manufactured and sold in this metropolis, which have never been soiled by the wearer.

If these good and charitable people cannot enter into my feelings for their poor applicants, I trust they will in future feel for their pockets, for I will maintain that a pocket has been lessened of seven shillings as often as a single Ruptured Patient obtains a double Truss, and the Patient doubly punished by wearing them. In perusing the aforesaid plan of the Institution, printed in 1819, I was struck with astonishment to find that out of 17,578 Patients who had Inguinal and Femoral Ruptures, 7,510 wore double Trusses. On examining my books for the last three years I find, that although a great number of my Patients have worn double Trusses, there is not one in five who wears a double one at this time ; and I am clearly of opinion, that not one n ten would ever require a double Truss, if an effectual single Truss was employed on their first being Ruptured.

Patient,—if you don't secure one Rupture,
You will soon have two,
If you neglect them,
They will soon secure you.

If either of those Patients to whom I have alluded, whose very existence depends upon the Truss they wear, had complained to the Subscribers that the Trusses they had bestowed were of no service whatever, they would have been considered ungrateful beings, utterly unworthy the kindness they had bestowed upon them; but let a friend, a brother, or child of their own, be placed before them in the same situation, and let them behold with their own eyes the wretchedness which they must inevitably endure, until welcome death puts a period to their misery, they would probably see the necessity of interfering personally in an affair of so much importance.

I often think, that during the few years which I have devoted to this business, if one-third part of the charitable people was pulling with me, who are now pulling against me, that I might have been instrumental in saving the lives of hundreds who have died prematurely of this disease, and rendered thousands perfectly comfortable, who are now in misery.*

* W. HALL TIMBREL observes, in his *Practical Observations on the management of Ruptures*, that no disease ever gave rise to so many new inventions as Ruptures.

If the learned doctor had said, that it arose from the imperfections of the common Truss, in defiance of his newly-invented calico pad, and double-tongued buckle, which his friend BLAIR so much admired, and for which he received a Gold Medal from the Society of Arts, he would have been correct.

A nobleman, whose name I am not authorised to mention, gave me five pounds for a single Truss. An eminent Solicitor, who resides in Westminster, gave me five guineas for two Trusses, as described in *fig. 3*, the principle of which he declares to be excellent; he has tried almost every new invention, and has authorized me to refer any gentleman to him for information. Several other gentlemen, who, from motives of delicacy, are desirous only to conceal their affliction from their acquaintance, would at any time submit to Surgical examination, if any good was likely to result from it; they have employed all kinds of Trusses which have been invented for the last twenty or thirty years. *Notwithstanding the numerous and well-authenticated cases which I have stated, party prejudices still remain unshaken.*

A certain Surgeon of a Rupture Society very recently declared, in the presence of several persons, that if all the Surgeons in London were to say that the bandage which I adopt in my own case was a good one, he would not believe them. If the said Surgeon, or any other Surgeon of a Rupture Society, will undertake to wear a common Truss upon their own person, of sufficient strength to secure my Rupture, I will undertake to cure them of their prejudice. I will run them three miles, or walk ten times

that distance, for twenty sovereigns. The Bandage I wear is precisely of the same construction as five out of six of those bad cases which I have alluded to; and such is the ease and comfort which I enjoy, that I protest I feel no more inconvenience nor pain, either from the effects of my Rupture, or from the galling of my Truss, than I should do from the bite of a flea; and I am capable of enduring that exertion and fatigue which I could not do four years ago, if I might have had the whole world for doing it.— Such was the debilitated state of my body at that time, (although I wore my Truss,) that I was under continual apprehension, every time I sneezed or coughed, that I should be Ruptured in some other part of the body.

A gentleman, who resides at Woolwich, has had several bandages of the same kind; and a Medical gentleman of that place requested him to put on one of a more recent patent, which was sent there for him to make a Report on. The Patient threw it off immediately, and ordered me to bring him down a new one; and when he paid for it, he declared, that he would rather give ten guineas for my Bandage, than he would wear out one of the Trusses which then lay before him, if he might have a thousand guineas for wearing it. *It is to be hoped, that reports from honorable and disinterested men, when*

addressed to the higher authorities, will have its due weight. The Surgeon being present, was desired to include the above in his report.

I called at the Old Jewry, upon W. NORRIS, Esq. Surgeon of the Charter House, and now President of the Royal College of Surgeons, about three years ago, and requested permission to shew him my improvement in the construction of Trusses. He replied, he did not think it possible to make an improvement in the construction of Trusses. I asked him if he was an advocate for any particular sort; he replied, that he considered SALMON and ODY's the best in use: having one of their Trusses at hand, I requested him to compare them together; he did so, and he examined the principle of each Truss very minutely, and he paid me the highest compliment that a man could bestow: "Yours," he said "is a very great improvement, indeed, a very great improvement."

He hoped that my terms were not exorbitant; and requested me to send him a card, and he would give them a trial. *He has done so.*

Sir WILLIAM BLIZARD, senior Surgeon of the London Hospital, when officiating as President of the Royal College of Surgeons, expressed his approbation of my invention in the most unequivocal terms,

and requested me to meet him the next day at the London Hospital, when he would immediately introduce them; agreeable to his request I waited upon him, when he sent me word, that he had not a case immediately under his care; but he would send for me the first case which came into the hospital.

Mr. LEESE, and likewise Mr. SPRY, Surgeons to the Honorable East India Company, have declared this to be the best Truss that has ever been submitted to their inspection.

Sir ASTLEY COOPER likewise bestowed the highest eulogium on my plan, the principle of which he acknowledged to be new: he desired me to leave my Trusses at Guy's Hospital, and he would adopt them.

I also shewed my improvement to the Secretary of the Royal College of Surgeons, who appeared much pleased with it: he said, "that man who can produce any new invention, which is calculated to alleviate so large a portion of human suffering, will ever be considered by me to be a great public character."

JOHN HEAVISIDE, Esquire, of George Street, Hanover Square, was much pleased with the principle of my Trusses; he examined the one I wore very minutely; he told me that he had once a foreign Ambassador apply to him, whose Rupture was similar to

my own, and every time he endeavoured to mount his horse, the Rupture came down, and he took him to every Truss-maker in London, and got a new Truss for him.*

The late GEORGE CHANDLER, Esquire, senior Surgeon of St. Thomas's Hospital, proved the effect of this patent upon his own person; his affliction was such as required two double Trusses at the same time, being Ruptured in four different places, and he acknowledged them to be the best that he had ever seen; and he declared, if he had sufficient influence in St. Thomas's Hospital, he would not permit a Truss of any other description to be employed there, *unless* any person could produce a better Truss.†

BENJAMIN TRAVERS, Esq. Surgeon of St. Thomas's Hospital, acknowledged that no man entertained a higher opinion of my Truss than he did, and that it deserved to be encouraged.‡

* It is no new thing for any Gentleman, having a bad Rupture, to know what every Truss-maker in London can do for him, (W. COLES excepted.)

† My Trusses were left at St. Thomas's Hospital three years ago by MR. CHANDLER'S request; but I have not heard that they have ever been shewn to Patient, or Pupil.

‡ It would afford me infinite pleasure, if I could say that any one of the aforesaid Gentlemen had put a Patient under my care.

ASTON KEY, Esq. Surgeon of Guy's Hospital, a near relation to Sir ASTLEY COOPER, said he would freely give his opinion on the merit of this Truss, which he did in the following words—"it is the best that has ever been got up."

The Surgeon of his Majesty's Customs has employed five different kinds out of eight, which are here exhibited as being adapted to the different species of Hernia, which he has placed under my care.

Messrs. BROOKS, BELL, CARPUE, CARLISLE, GRAINGER, and MAYO, Lecturers on Anatomy, have all spoken of this invention in the most favourable terms; and I am proud to add, that one of the latter gentlemen once purchased my Bandage for one of his Patients. The reader will not, under such circumstances, be surprised at being told, that there are thousands of persons in this metropolis alone who are utterly incapacitated from following any laborious employment, who, like myself, are capable of being brought into action with all the vigour of youth, did they but know where to obtain a remedy, or whom to apply to for advice. Scarcely can we cross a street in this metropolis but we behold men whose Ruptures excite the pity or disgust of all who behold them; they are dead to all earthly enjoyments, and by degrees are shut out from all Society; and frequently the very air they breath is tainted with their loathsome disease;

ask them the cause, and they will tell you that it originated from the incapacity of their Trusses to secure it. Perhaps I have not yet painted this disease in its proper colours; I shall therefore draw the attention of the Reader to the case of ROBERT HUBBARD, alluded to in page 47, although I have met with many worse cases than his.

This poor man, although of a middling age, being unable any longer to struggle with hard labour, was obligated to take shelter in a workhouse. One of the parishioners who had noticed his being employed in drawing the machine for watering the streets, who possesses more humanity than is commonly felt in behalf of such poor wretches, sent him to me to provide him a Truss; and if the Parish would not discharge the debt, he would discharge it himself. I found, on examining the Hernia, the penis had entirely disappeared. I enquired how he contrived to make water; he replied, that the water ran over the Rupture as water would run out of a bladder when a hole is cut in its side, which he usually wiped off with his shirt. *Persons in better circumstances* make use of a tin pipe to conduct the water from them. The great weight of the bowels often strips the skin from the bone; and the heat thereof causes a running or wound between the Rupture and the thighs, the smell of

which is extremely offensive, and can never be healed* while the Rupture is down.

I have kept up this man's Rupture three years, for the trifling sum of ten shillings and sixpence; and he is secure and comfortable to the present day. I have no doubt but there are hundreds of persons now in London ruptured, lingering out their youthful days in workhouses, who would be able, with the assistance of a proper Truss, to provide a comfortable support for themselves and families.

Having endeavoured to render this subject as familiar as possible to the Patient, by the former drawings, and the mode of applying each Truss, there yet remains one phenomenon of Rupture to be explained, viz. Irreducible Hernia.—Whether it is Umbilical, Inguinal, or Femoral, it will be scarcely necessary to add, that the cause generally arises from negligence or improper treatment. It is enough, however, for the Patient to know he has a Rupture, which cannot, (without hazarding his life,) be returned within the cavity of the belly, and that it assumes a globular appearance. The pad of the Truss, therefore, should be larger in circumference; and instead of being convex, as the former drawings represent, the pad must be made

* Fuller's earth, mixed with water, should be applied to keep the parts cold.

concave ; whereby the Patient derives the same support and comfort which the hollow of the hand is calculated to afford in such cases.

As many Surgeons have expressed an opinion that the Scrotal bandage, by pressing on the pubis, may injure the spermatic cords, I can only say, that I have never known any patient complain of it ; nor have I felt it myself, although I have frequently worn it for a week together without having occasion to adjust it, or take it off.

It should not, however, be employed in cases of obstruction in the urinary passages, nor in cases of irreducible Scrotal Hernia, as a pressure upon the intestines may produce strangulation. Patients having a Scrotal Hernia, should take care to put up every particle of the Rupture, and likewise the omentum, which is very soft and slippery, and place the pad as near the penis and testicles as possible ; and in cases where the opening into the purse is very large, the pad must also be large ; and it must occupy nearly the entire space between the legs, which drives the penis and testicles upon the opposite thigh. The thigh strap cannot well be too short to effect a firm pressure at the bottom part of the pubis, or bone between the thighs ; if the thigh-strap is too long, the pad will rise up towards the belly, and the Rupture will escape.

If the Rupture should by accident descend, while the patient wears this Bandage, he should not allow it to remain down any length of time, as the Rupture will get hard, and press the hair or stuffing of the Truss out of its proper place ; they must press the pad up with their hand, flush on the edge nearest the penis, and with a little care and attention, they will get completely master of their Rupture. This Bandage has been worn, in cases of Femoral Hernia, by male and female;* the understrap is in that case drawn the reverse side, in the same manner as the thigh-strap is worn to the common Truss, and the girdle passes through it, in which case the thigh-strap will require letting out about two inches longer.

The above Bandage has also a string sewed to the girdle near the hip bone, and another to the end of the thigh strap, to confine the strap in its proper place, which will prevent its sliding towards the fundament, when it would also allow the Rupture to escape. The omentum will sometimes protrude in large Scrotal Hernias, which the Patient should always put up when he goes to bed. If he suffers it to remain down any length of time, an adhesion might take place, which might prevent the possibility of its being again returned into the body.

* Ladies might communicate with Mrs. COLES either personally or by letter, post paid.

SIR ASTLEY COOPER recommends, that all elderly people should sleep in their Truss, lest any unexpected occasion should call the Patient from bed, unprepared for the sudden change of posture.* He likewise observes, that a small Hernia is more liable to be strangulated than a large one, the pressure upon the contents being more violent.—*Sir A. Cooper's Treatise on Hernia*, c. 7, p. 22.

In justice to the Patient, and to myself, it is but right to observe, that I never recommend the use of this Bandage to infants, when there is a prospect of effecting a cure; and I never have yet met with a single case which required palliative means. Every Patient, who allows a Surgeon or agent to apply this Bandage, should examine himself in a glass very minutely, before he takes it off. Numbers of people have entirely forgot how to apply it the next day. *Scrotal Hernia* is more difficult to manage than any other description, on account of the opening into the Scrotum, and the great weight of the abdominal parts being suspended over it; and it has occupied much more of my attention on account of its having been but little regarded by Anatomists, who generally pass over it in silence, or with perfect indifference. If it had been possible to secure Scrotal

* Valetudinarians will find the above Bandage admirably adapted to their cases.

Hernia by pressure upon the loose intestines, (or what high-learned Authors call abdominal parieties,) agreeable to the usual mode laid down by Anatomists, we should not perceive one Scrotal Hernia where we now find a hundred. Each of the before-mentioned Patients, as well as myself, have probably employed a Truss from the commencement of their affliction : the evil has frequently been pointed out, but no man has ever yet furnished a remedy equal to that which I now submit to the world.

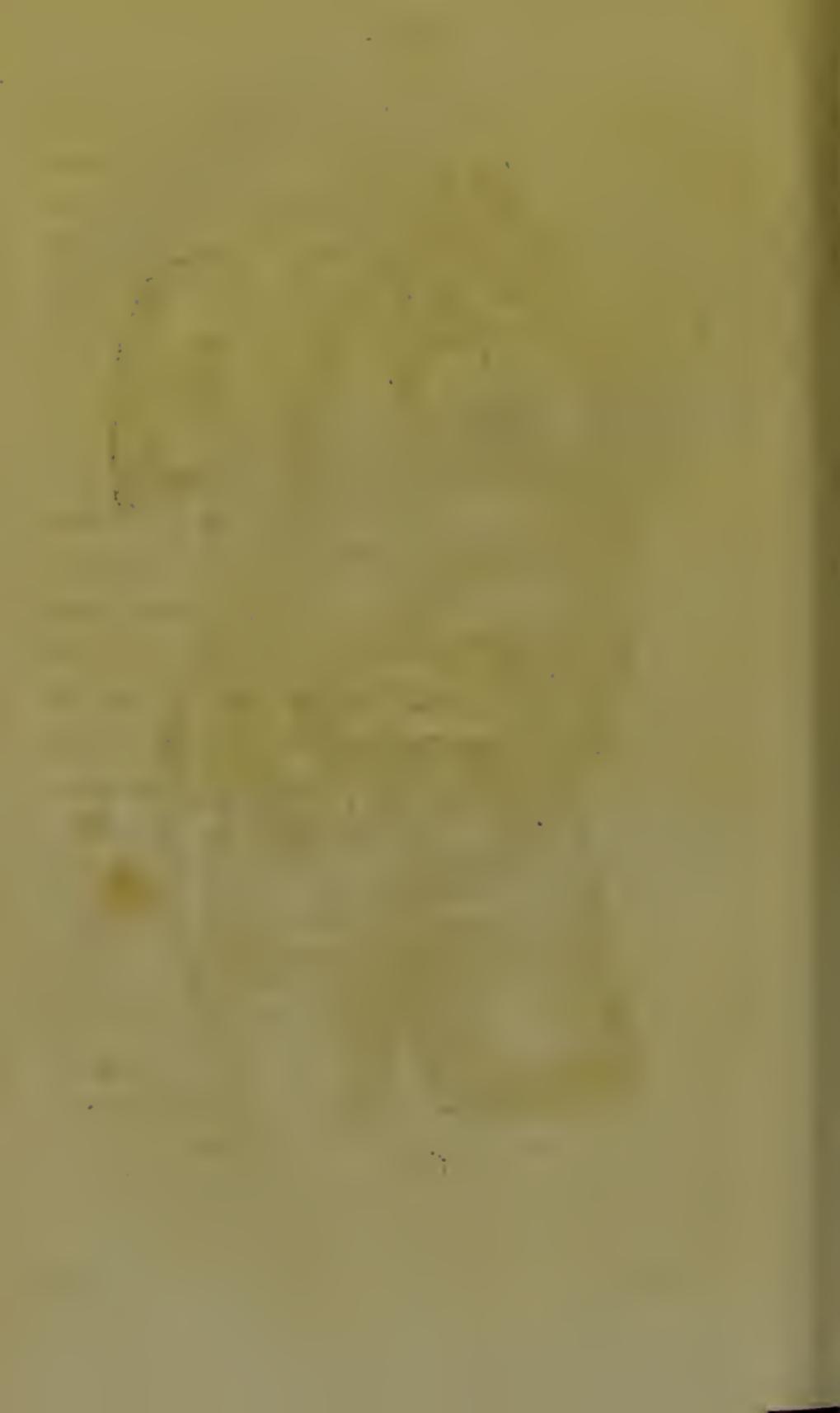
In perusing the plan of the Institution, to which I have before alluded, which particularly denominates the different species of Rupture which the Truss-Society had relieved in twelve years, amounting to nearly 23,000 cases, *I do not find Scrotal Hernia once mentioned.*

This appears the more remarkable, as the Surgeon, under whose superintendance the Institution had gained a pre-eminence over its competitors, was himself a Lecturer on Anatomy.

The following drawing exhibits the state of the bowels when divested of its internal support, viz. the peritonæum, or caul, which confines the bowels in the lower belly ; and common sense will tell you that it can only be secured, or kept in the body, by a pressure such as no human being is capable of enduring..



fig. 9.



I shall endeavour to illustrate this subject by supposing a lake or river, coming from the north, branching off in three different directions, east, south, and west; would any human being attempt to arrest the progress of either by pressure? no, you must follow my example, and raise a bank against it. Another example may be adduced, the truth of which thousands of Patients who are now living can testify, who have made a constant practice of reducing their Ruptures at least once in 24 hours, when they retire to rest, with their bodies in a perfectly horizontal posture; the bowels nevertheless will find their level, unless they are retained by external pressure, because they are higher than the os pubis; and a portion will always protrude into the serotum or purse, which might very reasonably be compared with the watery element; but were it possible to raise the two bodies in a perpendicular attitude, what would be the result? the water, like a Rupture, would rush out, never to return. This is an every-day occurrence, and millions of our fellow-creatures have thus ended their earthly career.

Having quoted a few observations which have escaped the lips of several eminent Surgeons, all of whom have spoken in favourable terms, I shall now state, without the least reserve, all that has ever been said against it to my knowledge; and add a few

anecdotes which I trust will enable the reader to reconcile *what otherwise* might appear inconsistent. A Surgeon, who presided over one of the largest establishments in England, informed me, that upon the average he put on a Truss per day throughout the year; and as his patronage was very great, it was much sought after; he had the opportunity of inspecting every new improvement that had lately been made in the form of a Truss, but he was sorry to say, that he considered mine to be the worst improvement he had ever seen; and he advised me to put my Trusses into my bag, and sink them into the Thames, and go and follow some other employment: this produced a smile on the countenances of the medical students who surrounded us, and, I might add, for a moment cast a cloud over my sanguine hopes; but I soon recovered, when I addressed him in the following words :—

SIR,—You told me just now, that you had a great many Ruptured Patients in this Hospital; if you will produce one of them who is similarly afflicted to myself, who is capable of performing that laborious exercise which I will perform in this Hospital, in your presence, I will give that man five guineas. He replied, he had men in that Hospital who could put me into their pockets. Some time after, I received a letter from the aforesaid gentleman, couched in nearly the

same language, wherein he advised me to keep away from Greenwich Hospital, which I did, until another Surgeon was appointed to succeed him in that office, to whom I also exhibited my improved Trusses. He not only approved of the principle, but immediately introduced me into the Surgery, to see what stock he had on hand. He declared his determination to adopt them as soon as he could clear the place of, what he was pleased to term, A HEAP OF RUBBISH.

Having shewn my improved Truss to one of the Surgeons of St. George's Hospital, at his own house, who highly complimented me for my ingenuity, and desired me to meet him the next morning at St. George's Hospital, when he would introduce me to Sir EVERARD HOME, and the other Surgeons, imagining, perhaps, that it need only be shewn to the aforesaid gentleman to insure its introduction into that Hospital; but Sir EVERARD, having more penetration than any other Surgeon who has inspected them, instantly discovered something in my plan which he observed was not new, and therefore it contained no charms for him.

Some time after, I was mentioning this circumstance to Mr. WHITEHEAD, one of the Governors of that Hospital, who had the curiosity to satisfy his own mind, why my Truss could not be employed in their Hospital if it was better than any other. He address-

ed a letter to the Committee, and desired me to forward it to the Hospital, and wait his arrival. The letter was laid before the Committee, and I believe acted upon previous to the Governor making his appearance; and the same Surgeon who had, upon the previous occasion, introduced me to his professional brethren, gave me a nod, and, whispering into my ear, told me, he feared that I should not succeed there. I very naturally asked him, why? because Mr. EGG has such a fast hold here, he replied. It is the first time that I ever knew an Egg have claws; I shall leave the reader to judge *what metal* his claws are made of. Mr. WHITEHEAD attended, and was evidently disappointed at my not being permitted to leave one of my Trusses for trial; he desired me, however, not to be cast down about it, as he would certainly bring it forward at some future period.

I was once exhibiting my Truss to a Surgeon in the City, and had scarcely been five minutes in the house, when a Patient came into the room, crouching like an ass under a heavy burden, and he proceeded instanter to divest himself of his load, viz. an opposite-sided self-adjusting patent Truss; and turning his small clothes down to his knees, exhibited his Truss, as drawn on *fig. 9*; the spring of which, instead of being placed on the opposite side, when it would have encompassed two thirds of the body, (*see Truss,*

fig. 1,) was placed on the Ruptured side, with the spring hanging down about the middle of the thigh. He laid it upon the table, saying, he would not wear it another day if they would give him the world, for it had almost killed him. I applied it to the reverse side, at which the surgeon appeared a little chagrined ; and the Patient cut a caper or two about the room, and observed, he could wear it that way ; but as it had punished him so severely, he never would wear it again. He then applied one of my Trusses, and observed, although it was much too large for him, he was in heaven, comparatively speaking. He desired I would permit him to wear it until I could furnish him with a new one ; and, on being informed that he might have one the next day, departed, when the following conversation took place :—The Surgeon asked what I charged for a single Truss, and what allowance I made. I told him my price, and that I allowed my agents one-third part ; and I would allow him the same. He said, that would not do. I asked him what would do. He said I must allow him half. I observed, that there was a great deal more mechanical labour in my Truss than in any other kind, and I could not furnish them upon such terms ; he replied, if he wanted any more Trusses he should not apply to me for them. I resolved, however, that if the Pa-

tient liked my Truss, he should know where to apply for a new one; and I printed my name, and place of residence in very legible letters, on the leather case of the spring; but in the sequel it will appear I was outwitted.

The Patient leaving town in great haste, took the new Truss, which was left for him at the aforesaid Surgeons, and wore the old one away; he returned to town again in the course of a week.

I forgot to mention one circumstance that occurred previous to the Patient coming into the room. The aforesaid Surgeon took up a common Truss, or what some persons call a GERMAN TRUSS, which had been given to me by one of my Patients, who had formerly been under Mr. EGG's care, which, he observed, was a single Truss.

I told him that the Patient bought it for a double one, and that he had paid three guineas for it. Oh, yes, he added, it is a double Truss. To talk about single or double Trusses, or the mode of applying them, is one thing; and to know how to purchase them, is another; and to shew that they had learnt the most important branch of the business, a book was presented to me by a partner in the concern, which, I believe, contained Mr. MAW's list of prices for Surgeon's Instruments, &c. and my attention was immediately directed to the common, or German Truss, which, in

the way of business, would realize a profit of 400 per cent. whereas my Truss, even if I could have complied with their terms, would only realize one hundred per cent profit; and therefore an insurmountable obstacle presented itself to my doing any good in the world.

A fortnight having elapsed, I waited upon the Surgeon for my old Truss, and the money for the new one, when I found both of my Trusses carefully packed up in a parcel, and I might take them, and go about my business. I asked the Surgeon what Truss he had employed. He answered, the common Truss. I observed, the least he could have done was to point out the defect of my Truss, and give me the opportunity to correct it, observing, that the best Truss in the world may be rendered useless, unless it fitted the Patient, or was properly applied.

Having a previous knowledge of the Patient, I waited upon him, and instead of receiving civility, or common politeness, for the hire of my old Truss, and the pains I had taken to furnish him with a new one, he said, that he did not order the Truss; but if I made his Surgeon pay for it, he would take care that they should not be a looser by it. Six months passed away before I could make up my mind to call upon the Surgeon for the aforesaid Trusses: on examining them, I found that the new one had not been

in the least soiled, except the leather case, to which something like vitriol had been employed to erase my name from it. I resolved to probe this filthy lucre system to the bottom; and if I could find no exception to the above rule, I had no alternative but that of advancing my price one-half. I therefore waited upon Mr. HENRY EARLE, who had placed more Patients under my care than all the Hospital Surgeons in the kingdom, and I made up my mind to give him a handsome fee. "Stop, stop!" says Mr. EARLE, "I never yet soiled my hands with the earnings of a Truss-maker, and I hope I never shall." I am happy to say I have found other exceptions to the above rule; nevertheless, I advise every Patient, when he consults his medical friend, never to ask whose Truss he recommends—rather ask whose Truss is best, and let it be optional to yourselves whether you adopt them or not.

Whether a Surgeon sends an order, or the Patient himself, they ought always to describe how a Patient is formed, whether round and corpulent, or thin made. If the Rupture be close to the thigh, it is a Femoral Rupture. The Truss must be shorter in the front part than would be required for an Inguinal Rupture; if the case be a Scrotal Rupture, the pad of the Truss must go as far beyond that of the Inguinal Rupture.

That I might be properly understood, that only can be considered Inguinal which will remain in the body without the aid of an instrument to confine it, and that which has forced a passage into the scrotum or purse, is Scrotal, whether the contents be large or small; the man who will suffer it to remain there, can have but little regard for himself, much less for his wife and family, if he should be so unfortunate as to have either, for life will soon become a burden to him.

If the Patient has tried various kinds of Trusses, and none will keep up his Rupture, or if the accident has recently happened, and he never wore a Truss before, he should so express it, and he may rely upon every attention being paid to meet the circumstances of the case: send likewise the number of inches round the body; and be particular in describing right or left, single or double, and which side is worst.

Every Patient, who will peruse this Book carefully, may acquire a perfect knowledge of the nature of their disease, and be enabled to form some idea which Truss is best adapted to their case.

As many thousand persons are officiating as Agents for other Truss makers in various parts of the kingdom, and none of them have, upon any one occasion, ever applied to me for a Truss, I consider

them to be no advocates for any improvement in the construction of a Truss; and therefore I do not invite such persons to act for me as Agents.

Respectable Tradesmen, residing in large manufacturing districts, who may be desirous of acting for me as agents, will please signify the same by letter post-paid, and, when duly authorised, their names shall appear in the second edition of this Work. Preference will be given to those who are afflicted.

Should any infirm Lady, or Gentleman, residing at a distance, require my personal attendance, my Terms will not exceed One Guinea per day, exclusive of travelling expences.

Every information relative to the Patient, should be forwarded, to furnish an idea what means is best to be employed in every case.

N. B. Riding Suspenders, Clavicle Bandages, and other Instruments for bodily deformity, upon very superior principles.

THE END.

